



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,804	09/14/2001	Fumihiko Nishio	SONYJP-122	5871
7590 06/03/2005				
Lerner David Littenberg Krumholz & Mentlik 600 South Avenue West Westfield, NJ 07090		EXAMINER HOSSAIN, FARZANA E		
		ART UNIT		PAPER NUMBER
		2616		

DATE MAILED: 06/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/807,804

Applicant(s)

NISHIO ET AL.

Examiner

Farzana E. Hossain

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 September 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on ____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4-25-02, 4-18-01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statements filed April 18, 2001 and April 25, 2002 fail to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because the four non patent literature documents do not have English translations. Please provide the examiner with English translations of all four of the non-patent literature documents.

It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609 ¶ C(1).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claim 29 is rejected under 35 U.S.C. 102(e) as being anticipated by Arai et al (US 2004/0221307 and hereafter referred to as "Arai").

Regarding Claim 29, Arai discloses an apparatus with a program table collection/storage or database to receives a plurality of program specific information (PSI) tables (Page 16, paragraphs 0239, 0245). Arai discloses that there is an input (Figure 9, 41) and that the apparatus comprises of service information (SI) tables (Page 16, 0238, 0245). Arai discloses that the apparatus also receives a plurality of PSI and SI tables so that there are different versions collected or an updated table can be identified from the collection of tables (a change processor to identify the changed information) (Page 16, 0245). Arai discloses that there is a table generator or program guide (PG) information is generated from any changes in updated tables (Page 16, 0245-0246).

4. Claims 30 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Hendricks et al (US 5,990,927 and hereafter referred to as "Hendricks")

Regarding Claim 30, Hendricks discloses an apparatus that has an input to receive PG information broadcasted via the operations center (Column 6, lines 45-47). Hendricks discloses a set top terminal (STT) with a microprocessor or an authoring device that generates integrated program guide (PG) information including the PG information broadcasted (Column 10, lines 59-67, Column 11, lines 18-23) and other content (Figure 18). Hendricks discloses that there is local storage or database (Figure

4, 620) that stores PG information (Column 13, lines 50-55), additional content (Figure 18) and integrated program guide information (Column 10, lines 59-67).

Regarding Claim 31, Hendricks discloses a STT that receives video and program control signals that are broadcasted (Column 13, lines 24-40). Hendricks discloses that the PG information is extracted from the signals broadcasted (Column 6, lines 26-30, Column 13, lines 44-65). Hendricks discloses that the STT has a microprocessor that processes the PG information based on the control signal received by the headend (Column 10, lines 59-67).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 2, 4, 5, 7-14, 16-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Donnelly (US 2002/0199192).

Regarding Claim 1, Hendricks discloses a transmission method (Column 5, lines 62-67, Column 6, lines 1-14). Hendricks discloses generating a program control information signal or set top terminal control information stream (STTCIS) including the data of the schedule and description of the programs or generating program guide (PG) information including a control signal (Column 13, lines 42-44)) to display to the subscriber or viewer (Column 13, line 44-55). Hendricks discloses that signals are

transmitted and that video signals and program control signals (PG information) are received at the STT (Column 6, lines 41-48). Hendricks fails to disclose the claimed video and audio signals. Donnelly discloses that electronic program guide information (EPG) is transmitted with MPEG (video) and audio data (Page 5, paragraphs 0081). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks to transmit PG information with video and audio signals (Page 5, paragraphs 0081) as taught by Donnelly in order to provide a viewer with a convenient way to select programs and to describe new channels or services to the viewer (page 1, paragraphs 2, 3) as disclosed by Donnelly.

Regarding Claim 2, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that the STTCIS can be text or the control signal can be described by script (Column 14, lines 16-21).

Regarding Claim 4, the combination of Hendricks and Donnelly disclose the claimed limitation, wherein Donnelly discloses that programming and program guide block or information is transmitted in a carousel (Page 5, paragraphs 0082, 0084).

Regarding Claim 5, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that the STTCIS generates menus or program guides (Column 13, lines 51-55) and that it sends advertisement clips (Column 13, lines 56-65). Hendricks also discloses that video signals for promos can be used in windows of menus or program guides (Column 14, lines 22-36).

Regarding Claim 7, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that the cable headend's signal processor performs necessary encryption of

signals in order to prepare the signals for a part of the PG information to be encrypted prior to transmission (Column 9, lines 7-9, 29-30).

Regarding Claim 8, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that the PG information is transmitted (Column 13, lines 42-44). Hendricks discloses that the program guide information includes the schedules of the program (Column 13, lines 55-62). Hendricks discloses that if there is a change to the program guide information of any programs, the changes will be transmitted using STTCIS (Column 19, lines 36-49 and Column 9, lines 50-62). Hendricks does not disclose that the information is transmitted a plurality of times in a day or that in the event of changes that PG information will be transmitted continuously. Donnelly discloses that programming and program guide block or information is transmitted in an endless loop or continuously (Page 5, paragraphs 0082, 0084).

Regarding Claim 10, Hendricks discloses a STT or receiving device (Figure 3, 220). Hendricks discloses that a video signal and STTCIS signal including PG information will be received by the STT (Column 6, line 45-48). Hendricks does not explicitly disclose that audio data is received by the STT. Hendricks discloses that the STT has a microprocessor, which receives signals to process or receiving section (Figure 4, 602). Hendricks discloses a decompressor, which can extract signals from the broadcast signal (Column 6, lines 26-30). Hendricks discloses that the microprocessor will generate menus or program guide based on the PG information (Column 10, lines 59-67, Column 11, lines 19-23). Donnelly discloses that audio data is transmitted to a television (Page 5, paragraphs 0081). Therefore, it would have been

obvious to one of ordinary skill at the time the invention was made to modify Hendricks to transmit audio signals to a television (Page 5, paragraphs 0081) as taught by Donnelly in order to provide a viewer with a convenient way to select programs and to describe new channels or services to the viewer (page 1, paragraphs 2, 3) as disclosed by Donnelly.

Regarding Claim 11, the combination of Hendricks and Donnelly disclose all the claimed limitations, wherein Donnelly, as disclosed above teaches the transmission of program guide information based on a carousel system or the extraction section, which is operable to resolve a carousel structure in a carousel system. Donnelly also discloses that the TV system (includes set top box) receives a broadcast signal and the signal is extracted (Page 5, paragraphs 0030-0032). Donnelly discloses that programming and program guide block or information is transmitted in a carousel system (Page 5, paragraphs 0082, 0084).

Regarding Claim 12, Hendricks discloses all the limitations of Claim 10. Hendricks discloses that the STTCIS generates menus or program guides (Column 13, lines 51-55) and that it sends advertisement clips to be displayed with the EPG (Column 13, lines 56-65, Column 14, lines 22-28).

Regarding Claim 13, Hendricks discloses all the limitations of Claim 10. Hendricks discloses that the cable headend's signal processor performs necessary encryption of signals in order to prepare the signals for a part of the PG information to be encrypted prior to transmission (Column 9, lines 7-9, 29-30). Hendricks also

describes that STT has a decrypting section (Figure 4, 600) in order to decrypt any encrypted PG information.

Regarding Claim 14, Hendricks discloses all the limitations of Claim 10. Hendricks discloses that the program guide information is transmitted. However, Hendricks does not disclose that the PG information is transmitted a plurality of times a day. Hendricks discloses that the STT has permanent and temporary storage for storing the PG information when it is transmitted (Figure 4, 620). Donnelly discloses that the PG information is transmitted on an endless loop or plurality of times a day (Page 5, paragraph 0082, 0084).

Regarding Claim 16, Hendricks discloses all the limitations of Claim 10. Hendricks discloses that the microprocessor or retrieval processing section operates to access or retrieve the PG information (Column 11, lines 12-23).

Regarding Claim 17, Hendricks discloses all the limitations of Claim 10. Hendricks discloses that the STT has ROM or non-volatile memory in order store PG information (Figure 4, 620).

Regarding Claim 18, Hendricks discloses all the limitations of Claim 1. Hendricks discloses STTCIS, which controls the PG information to be displayed for particular menus (Column 13, lines 45-55).

Regarding Claim 19, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that STTCIS controls the PG information displayed. It is noted that filtering of the EPG is met by filtering the available options relevant to the program selected by the

viewer (Figures 16a, 16b, 16c, 16d). Hendricks discloses that Overlay Menus or EPGs only display a part of the EPG (Column 13, lines 4-20).

Regarding Claim 20, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that STTCIS has information to select a program or condition information (Column 13, lines 56-65), which includes channels, programs, and genres (Figure 16a).

Regarding Claim 21, Hendricks discloses all the limitations of Claim 1. Hendricks discloses that PG information transmitted includes channels, program descriptions, program category, and advertisements (Column 14, lines 56-65).

Regarding Claim 22, Hendricks discloses all the limitations of Claim 5. Hendricks discloses that the advertisement information has information to select advertisements in order to display whether it is due to condition information for targeted advertisements for particular viewers (Column 34, lines 49-51) or a particular advertisement for a specific program (Column 13, lines 63-65, Column 14, lines 23-30).

Regarding Claim 23, Hendricks discloses all the limitations of Claim 10. Hendricks discloses that the STTCIS controls the display mode by a determination or identification of which PG information to display (Column 13, lines 52-55).

Regarding Claim 24, Hendricks discloses all the limitations of Claim 10. Hendricks discloses a decompressor, which can extract signals from the broadcast signal (Column 6, lines 26-30). Hendricks discloses that the microprocessor will generate menus or program guide based on the PG information (Column 10, lines 59-67, Column 11, lines 19-23). Hendricks discloses that the PG information extracted is

based on condition information such that the specific menus or submenus or EPGs are created based on the type of channels and/or program categories (Figure 16a).

Regarding Claim 25, Hendricks discloses all the limitations of Claim 24. Hendricks discloses that the user selects the information to view on an EPG or the condition information is set by the user of STT (Figure 16a).

Regarding Claim 26, Hendricks discloses all the limitations of Claim 16. Hendricks discloses that the PG information that is displayed or retrieved is based on the user profile (Column 34, lines 26-33).

Regarding Claim 27, Hendricks discloses all the limitations of Claim 26. Hendricks discloses that the personal profile of the user comprises a channel preference, a preference on the length of program, and a genre preference (Figure 16a, Column 34, lines 53 –67, Column 35, lines 1-10).

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Donnelly as applied to claim 1 above, and further in view of Lemmons et al (US 6,442,755 and hereafter referred to as “Lemmons”).

Regarding Claim 3, Hendricks does not disclose that the PG information is described in extensible markup language (XML). Lemmons discloses that the PG data transmitted to interpret markup language including XML (Column 2, lines 13-27 and Column 3, lines 20-31). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks in view of Donnelly to describe PG information in XML (Column 2, lines 13-27 and Column 3, lines 20-31) as taught by

Lemmons in order to provide an interactive television program guide that arranges program guide display elements and selects program guide functionality using a markup language for the additional advantage that EPG display screens may be modified by downloading markup language documents without user interventions and without modifying the code of the application (Column 1, lines 32-35) as disclosed by Lemmons.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Donnelly as applied to claim 1 above, and further in view of Arai.

Regarding Claim 6, Hendricks only discloses that the program guide information is transmitted by an operations center (Figure 1, 202). Hendricks does not disclose that the PG information is from a plurality of different broadcasting systems. Arai discloses that the PG information is from a plurality of broadcast service providers or systems (Page 2, paragraph 0019). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks in view of Donnelly to include program information from different broadcasting systems (Page 2, paragraph 0019) as taught by Arai in order to provide different features or services unlike existing electronic program guides (EPG) (Page 1, paragraph 0012) as disclosed by Arai.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Donnelly as applied to claim 8 above, and further in view of Suzuki (US 5,790,170).

Regarding Claim 9, Hendricks in view of Donnelly does not disclose that a transmission schedule to transmit all the PG information is transmitted. Suzuki discloses that the distribution center or cable television station transmits the transmission schedule (Abstract). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks in view of Donnelly to include a transmission schedule (Abstract) as taught by Suzuki in order to provide efficient use of the network (Column 3, lines 1-6) as disclosed by Suzuki.

10. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Donnelly as applied to claim 14 above, and further in view of Suzuki and Cuccia (US 6,337,719).

Regarding Claim 15, Hendricks in view of Donnelly does not disclose that the transmission schedule is included in the broadcast signal or that the receiving device has a power control section for controlling the power source in accordance to the transmission schedule. Suzuki discloses that the distribution center or cable television station transmits the transmission schedule (Abstract). Suzuki does not teach about a power control section in the receiving device. Cuccia discloses that if the receiving apparatus (device) is in power off mode that the apparatus has controlling means or power control section to power the receiving apparatus so that EPG or PG information can be transmitted according to its schedule (Column 2, lines 21-27, 50-63 and Column 2, lines 40-55, 60-61). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks in view of Donnelly to include a

transmission schedule (Abstract) as taught by Suzuki in order to provide efficient use of the network (Column 3, lines 1-6) as disclosed by Suzuki. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks in view of Donnelly to include a power control section to control the power source in accordance with the transmission schedule (Column 2, lines 21-27, 50-63 and Column 2, lines 40-55, 60-61) as taught by Cuccia in order to have up to date information without having to transmit information in advance (Column 1, lines 57-62) as disclosed by Cuccia.

11. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Donnelly as applied to claim 17 above, and further in view of Ellis (US 6,820,278).

Regarding Claim 28, Hendricks in view of Donnelly do not disclose that the initial set of program guide information is stored at a time of shipment from a factory. Ellis discloses that the set top box or terminal can be programmed at the time of manufacture at a warehouse prior to distribution to comprise of PG application (Column 2, lines 28-39, Column 5, lines 54-67, Column 6, lines 1-7). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks in view of Donnelly to include stored PG information at the time of shipment in a warehouse (Column 2, lines 28-39, Column 5, lines 54-67, Column 6, lines 1-7) as taught by Ellis in order to provide a cooperative environment for an interactive television system (Column 2, lines 1-4) as disclosed by Ellis.

12. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks in view of Suzuki and Cuccia.

Regarding Claim 32, Hendricks discloses all the limitations of Claim 31.

Hendricks does not disclose that the receiving device has a power control section for controlling a power source in accordance with a transmission schedule of the at least one broadcast signal. Suzuki discloses that the distribution center or cable television station transmits the transmission schedule (Abstract). Suzuki does not teach about a power control section in the receiving device. Cuccia discloses that if the receiving apparatus (device) is in power off mode that the apparatus has controlling means or a power control section to power the receiving apparatus so that EPG or PG information can be transmitted according to its schedule (Column 2, lines 21-27, 50-63 and Column 2, lines 40-55, 60-61). Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks to include a transmission schedule (Abstract) as taught by Suzuki in order to provide efficient use of the network (Column 3, lines 1-6) as disclosed by Suzuki. Therefore, it would have been obvious to one of ordinary skill at the time the invention was made to modify Hendricks to include a power control section to control the power source in accordance with the transmission schedule (Column 2, lines 21-27, 50-63 and Column 2, lines 40-55, 60-61) as taught by Cuccia in order to have up to date information without having to transmit information in advance (Column 1, lines 57-62) as disclosed by Cuccia.


Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farzana E. Hossain whose telephone number is 571-272-5943. The examiner can normally be reached on Monday to Friday 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FEH
May 26, 2005


VIVEK SRIVASTAVA
PRIMARY EXAMINER